

SECTION 02110

CLEARING, GRUBBING, AND STRIPPING

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes clearing, grubbing, and stripping, removing roadways, clay pipe subdrain system, abandoned utilities, and borehole grout, and hauling, unloading, and stockpiling these materials.

1.02 RELATED SECTIONS AND PLANS

- A. Section 02100 - Surveying
- B. Section 02200 - Earthwork
- C. Section 02270 - Erosion and Sediment Control
- D. Section 13000 - Borrow Area Management
- E. Section 13010 - Impacted Material Placement
- F. Borrow Area Management and Restoration (BAMR) Plan, Revision 0, May 1997
- G. Surface-Water Management and Erosion Control (SWMEC) Plan, Revision 0, May 1997
- H. Impacted Materials Placement (IMP) Plan, Revision 1, October 1997
- I. Part 6 - Statement of Work
- J. Part 8 - Environmental Health and Safety, and Training Requirements

1.03 DEFINITIONS

- A. Clearing consists of the removal of trees, bushes, vegetation and other surface debris that are 18 inches or more above the ground surface.

- B. Grubbing consists of the removal of stumps, roots, and vegetation to a depth of 3 feet below the existing ground surface or subgrade elevation, whichever is lower. Grubbing also includes removal of roadways, clay pipe subdrain system, abandoned utilities, and borehole grout associated with abandoned monitoring wells, boreholes, piezometers, and lysimeters. Removal of the existing roadways shall include removal of road courses and the subgrade elevation shown on the construction drawings unless otherwise directed by the Construction Manager.
- C. Stripping consists of the removal of the topsoil layer (6 inches minimum) including roots and organic matter, grass, and other material unsuitable for use as subgrade or compacted fill.

1.04 SUBMITTALS

- A. Submit a Contractor's Work Area Plan to the Construction Manager for review within 15 calendar days from Notice to Proceed. Limits of the Contractor's work area shall be as shown on the Construction Drawings. Contractor's Work Area Plan shall include the following as a minimum:
 - 1. location of construction laydown area;
 - 2. locations of stockpiles for material generated from clearing, grubbing, and stripping operations;
 - 3. layout and typical cross sections of roads within the Contractor's work area;
 - 4. location of equipment service area;
 - 5. construction site access and haul road layout; and
 - 6. construction utilities layout including construction power and construction water.

1.05 HEALTH AND SAFETY REQUIREMENTS

- A. Environmental, health and safety, and other training requirements shall be as specified in Part 8 of the Contract Documents.

PART 2 PRODUCTS

2.01 MATERIALS

Section not used.

2.02 EQUIPMENT

- A. Furnish equipment to perform the clearing, grubbing, and stripping activities associated with the work of this Section and with managing the Contractor's work area.

PART 3 EXECUTION

3.01 GENERAL

- A. Dust control for clearing, grubbing, and stripping activities shall be in accordance with Part 6 of the Contract Documents.
- B. Borrow area management shall be in accordance with Section 13000 and the BAMR Plan.

3.02 EROSION AND SEDIMENT CONTROL

- A. Prior to implementing any of the work described in this Section, install surface-water management and erosion and sediment controls in and around the area to be disturbed as required by Section 02270 and the SWMEC Plan. Manage surface water and maintain erosion and sediment controls through completion of this Contract.

3.03 CLEARING AND GRUBBING

- A. Perform clearing and grubbing to the limits indicated on the Construction Drawings.
- B. Perform clearing and grubbing as separate activities.
- C. In those areas where only clearing is required, perform clearing in a manner that minimizes disturbance to the existing ground surface.
- D. Chip cleared materials of a woody nature to a size that is suitable for use as mulch. Keep cleared material to be chipped as free of soil and other organic matter as possible. Cleared material smaller than 3 inches in size need not be chipped.
- E. Stockpile cleared material separately in Contractor's work area in accordance with the approved Contractor's Work Area Plan or other areas as approved by the Construction Manager.

- F. Load and haul grubbed material and unload and place in the On-Site Disposal Facility (OSDF) as per the IMP Plan.
- G. After completion of grubbing, fill and compact depressions outside the grading limits. Material and compaction shall meet the requirements of compacted fill specified in Section 02200. Match fill elevation to the surrounding grade and grade to drain.

3.04 STRIPPING

- A. Perform stripping within the clearing and grubbing area as indicated on the Construction Drawings. Haul stripped material to the Contractor's work area and stockpile separately in accordance with the approved Contractor's Work Area Plan.
- B. If soil or weather conditions are unsuitable for stripping, due to precipitation or high wind as determined by the Construction Manager, cease stripping activities until permission to resume stripping activities is obtained from the Construction Manager.
- C. Construct stockpiles in Contractor's work area unless otherwise directed by the Construction Manager for stripping materials. Stockpile slopes shall be no steeper than 3H:1V (horizontal:vertical). Grade stockpiles to drain, seal by tracking parallel to the slope contours with a dozer, and dress daily during periods when stripping material is placed on, or borrowed from, stockpile. Install erosion and sediment control measures at the stockpile areas in accordance with Section 02270 and the SWMEC.
- D. Road courses and impacted soil below the road subgrade shall be removed, hauled, unloaded, and placed in the OSDF as per the IMP Plan.

3.05 EQUIPMENT DECONTAMINATION

- A. Equipment used for removal, hauling, unloading, and placement of road courses, impacted material below road subgrade, or other stripped or grubbed material into the OSDF shall be decontaminated as specified in Part 8 of the Contract Documents.

3.06 SURVEY CONTROL

- A. Survey the limits of cleared, grubbed, and stripped surfaces in accordance with Section 02100.

[END OF SECTION]